Age and Ageing 2021; **50:** 597–598
doi: 10.1093/ageing/afaa257
Published electronically 5 December 2020

LETTER TO THE EDITOR

Adaptation of the comprehensive geriatric assessment to a virtual delivery format

Julia Loewenthal[1], Clark DuMontier[1,2], Lisa Cooper[1], Laura Frain[1], Louis S. Waldman[1], Shoshana Streiter[1], Kristin Cardin[1], Samir Tulebaev[1], Houman Javedan[1], Ariela R. Orkaby[1,3], Tammy Hshieh[1,2]

[1]Division of Aging, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA
[2]Dana-Farber Cancer Institute, Boston, MA, USA
[3]New England Geriatric Research, Education, and Clinical Center (GRECC), VA Boston Healthcare System, Boston, MA, USA

Address correspondence to: Julia Loewenthal, 75 Francis Street, Boston, MA 02115 USA.
E-mail: JLoewenthal@bwh.harvard.edu

Keywords: telemedicine, telehealth, geriatrics, geriatric assessment

Sir,

The COVID-19 pandemic necessitated rapid implementation of telehealth to facilitate care delivery. Telehealth is important for providing safe care to older adults at increased vulnerability to COVID-19 with needs for ongoing management of other acute and chronic conditions. The U.S. Centers for Medicare and Medicaid Services reported approximately 13,000 beneficiaries per week received a telemedicine visit prior to the pandemic, with expansion to over 1.7 million per week by the end of April 2020 [1], a 130-fold increase in visits.

Our division, part of a tertiary medical center, cares for older adults through co-management models embedded into orthopedic, trauma, and thoracic surgery, oncology, hospital medicine, and primary care. The core tool for evaluation and management of older adults is the comprehensive geriatric assessment (CGA). Videoconference encounters are comparable to face-to-face encounters for cost, patient acceptance, and diagnostic accuracy [2]. Based on limited data, many older patients are interested in and satisfied with telehealth visits. Reported barriers include low confidence in ability to use technology and hearing impairment [3,4]. The feasibility and effectiveness of the virtual CGA for care remains unknown. Two geriatric oncology groups reported their experience in adapting the CGA for telehealth [5,6]. Here, we describe how we adapted the CGA for virtual delivery and compare this to in-person delivery (Table 1).

Both inpatient and outpatient services moved to virtual delivery at the height of the pandemic in our area (Appendix). After 4 weeks, inpatient services transitioned to a hybrid model while outpatient remained mostly virtual. In a qualitative survey of the clinicians in our division, all reported using telehealth and found it highly feasible with plans to continue use in the future. Seventy-one percent of clinicians reported that patients found telehealth acceptable all of the time, with 29% most of the time.

Access is crucial for the success of telehealth. In March 2020 the U.S. Department of Health and Human Services modified the Health Insurance Portability and Accountability Act, allowing clinicians to use any remote communication technology for communication with patients. Our hospital used videoconferencing technology integrated into the electronic health record, requiring patients to have access to a smartphone, tablet, or computer in addition to internet or cellular data. Recent reports suggest many older adults lack digital access to facilitate telehealth, and a proportion with access struggled to use technology for video or even telephone-only visits [7,8]. Our services used approximately 76% telephone-only and 26% video visits. We found that patients with Medicare used video visits more often than patients with private insurers (Appendix). As the model for CGA delivery continues to evolve, it will be important to both prioritize access and identify CGA domains that can be adequately assessed by each visit modality.

Supplementary Data:

Supplementary data mentioned in the text are available to subscribers in *Age and Ageing* online.

Table 1. Domains of the comprehensive geriatric assessment (CGA) as delivered during in-person vs. telehealth clinical encounters.

Domain	In-person CGA	Telehealth CGA
Comorbidities	Chart review Clinical interview	Same, but improved interview with involvement of caregiver
Geriatric Medication Review	Semi-structured interview using chart list and patient input	Semi-structured interview and medication reconciliation in the home
Function	ADLs and IADLs	Same
Mobility	Falls screen Chair stands Timed up and go (TUG) Gait speed	Falls screen With video: Chair stands, observation of gait and movement in living space
Sensory	Finger rub/whisper test for hearing Visual screening	For patients who are hard of hearing: ensure access to hearing aids, use amplification device, use closed captioning. For patients with visual impairment: ensure access to glasses, involve caregiver with video technology.
Cognition	Clinical interview Cognitive screening tests*	Telephone-only: clinical interview, telephone-MoCA, CAM With video: Mini-Cog or MoCA
Mood	Mood screening questionnaire#	Same
Nutrition	Food quality and access Mini Nutritional Assessment (MNA) Clinic weight Physical exam	Food quality and access MNA Ask for weight on home scale With video: Physical exam
Social Domains	Clinical interview regarding social domains (e.g. home services, caregiver stress/support, social network, etc.)	Same
Advance Care Planning	Serious illness conversation Completion of HCP and/or MOLST form in person	Serious illness conversation Completion of remote HCP and/or MOLST form (via two-clinician verbal authorization, electronic communication, or mail)
Frailty	Frailty screen^	Same

*Confusion Assessment Method (CAM), Mini-Cog, Montreal Cognitive Assessment (MoCA), or other indicated cognitive screening tool. #May include Patient Health Questionnaire (PHQ) -2 or −9, Geriatric Depression Scale (GDS), Generalized Anxiety Disorder (GAD) -2 or −7, and/or other indicated tools. ^FRAIL scale (fatigue, resistance, ambulation, illnesses, and loss of weight), Clinical Frailty Scale (CFS), and/or frailty index (FI).

Declaration of Sources of Funding:

C DuMontier is supported by the Harvard Translational Research in Aging Training Program (National Institute on Aging of the National Institutes of Health: T32AG023480). A Orkaby is funded by Veterans Administration Clinical Science Research and Development Career Development Award (CDA-2) IK2-CX001800.

Declaration of Conflicts of Interest: None.

References

1. Verma S. Early Impact of CMS Expansion of Medicare Telehealth During COVID-19. Health Affairs Blog, July 15, 2020. doi: 10.1377/hblog20200715.454789.
2. Bashshur RLS, Gary W. History of telemedicine: evolution, context, and transformation. vol. 2009. New Rochelle (NY): Mary Ann Liebert, 2009.
3. Hawley CE, Genovese N, Owsiany MT *et al.* Rapid integration of home telehealth visits amidst COVID-19: what do older adults need to succeed? J Am Geriatr Soc 15 Sep, 2020.
4. Murphy RP, Dennehy KA, Costello MM *et al.* Virtual geriatric clinics and the COVID-19 catalyst: a rapid review. Age Ageing 20 Aug, 2020.
5. DiGiovanni G, Mousaw K, Lloyd T *et al.* Development of a telehealth geriatric assessment model in response to the COVID-19 pandemic. J Geriatr Oncol 2020 Jun; 11: 761–3.
6. Wall SA, Knauss B, Compston A *et al.* Multidisciplinary telemedicine and the importance of being seen. J Geriatr Oncol 29 May, 2020.
7. Roberts ET, Mehrotra A. Assessment of disparities in digital access among Medicare beneficiaries and implications for telemedicine. JAMA Intern Med 3 Aug, 2020.
8. Lam K, Lu AD, Shi Y, Covinsky KE. Assessing telemedicine Unreadiness among older adults in the United States during the COVID-19 pandemic. JAMA Intern Med 3 Aug, 2020.

Received 28 September 2020; editorial decision 26 October 2020